$\qquad$ Date: $\qquad$
Part A: Circle T for true or F for false. ( 1 mark each, total 6 marks)

1. All samples of the same pure substance have different properties. T
2. Water, carbon dioxide, and table salt are examples of elements. T F
3. Orange juice and muddy water are examples of suspensions. T F
4. The best way to separate a mixture of iron filings and sand is to use magnets. T F
5. A solution is saturated when no more solute can be dissolved in it. T F
6. Basic solutions have pH values that are below 7. T

Part B: Matching. ( 1 mark each, total 10 marks)
Match each term with the correct definition on the right.
7. $\qquad$ A. Substance that cannot be broken down, consists of only one kind of particle.
8. $\qquad$ Dilute
B. Is a sour-tasting solution, reacts with metals, causes serious burns.
9. $\qquad$ Unsaturated
C. A mixture with clumps of a solid throughout the liquid.
10. $\qquad$ Solubility
D. Contains two or more pure substances; made of 2 or more kinds of particles.
11. $\qquad$ Dissolve
E. A bitter tasting solution, feels slippery, reacts with fats and oils, causes serious burns.
12. $\qquad$ Suspension
F. Mix completely with another substance.
13. $\qquad$ Acid
G. A solution with a low concentration of solute.
14. $\qquad$ Base
$H$. The ability of a substance to dissolve in a solvent.
15. $\qquad$ Element
I. A solution in which more of the solute can be dissolved.
16. $\qquad$ Mixture
J. A mixture that has been treated to prevent it from separating.

Part C: Multiple Choice. ( 1 mark each, total 3 marks )

1. If you have a sample consisting of a pure substance made of two or more different elements, you have $a(n)$
a. Compound
b. Element
c. Mixture
d. Solution
2. A scientist combines oxygen and hydrogen to form water. This combination illustrates that water is...
a. An atom
b. An element
c. A mixture
d. A compound
3. Concrete is an example of a...
a. Solution
b. Suspension
c. Compound
d. Mechanical mixture

Part D: Identify the following products as either a suspension, mechanical mixture or solution.
( 1 mark each, total 4 marks)

| Product | mechanical mixture, suspension or solution? |
| :--- | :--- |
| A.Homogenized Milk |  |
| B. Regular tap Water |  |
| C. Granola |  |
| D. Hand lotion |  |

Part E: Choose the best method for separating things from the mixtures below. Possible choices are listed under the table.( 1 mark each, total 4 marks)

| Situation | Best Method of Separation |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| a.Separating salt from saltwater. |  |  |  |  |  |
| b.Separating sawdust from sand. |  |  |  |  |  |
| c.Separating peanuts from a bowl of various mixed nuts. |  |  |  |  |  |
| d.Separating flour from water. |  |  |  |  |  |
| Picking apart $\underline{\text { Filtering }}$ $\underline{\text { Using density }}$ |  |  |  |  |  |

